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Ithaca, NY: A Regional Overview
Ithaca, NY is a college town. About 1 in 5 workers in the county are employed by Cornell University. Thirty percent of the population are full-time college students.

Despite being one of the smallest metros in the state, the Ithaca metro area has continued to grow its jobs and population over the past decade while other cities in Upstate NY have struggled.
Ithaca is centrally located near many mid-sized metropolitan areas, including:

Rochester, NY MSA: 1,071,082
Scranton-Wilkes Barre-Hazelton, PA MSA: 555,485
Buffalo-Cheektowaga-Niagara Falls, NY MSA: 1,130,152
Allentown-Bethlehem-Easton, PA-NJ MSA: 842,913
Albany-Schenectady-Troy, NY MSA: 883,169
Ithaca is also close to several large metropolitan areas, including:

Toronto, ON CMA: pop. 5,928,040 (2016)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA: 6,096,372
Baltimore-Columbia-Towson, MD MSA: 2,802,789
Pittsburgh, PA MSA: 2,324,743
The Ithaca, NY metropolitan statistical area (MSA) covers all of Tompkins County.

In 2018, the Ithaca metro area was home to just over 100,000 people. The City of Ithaca was home to 31,000 people (2018).
Although Ithaca has proved resilient during economic downturns and performs better than most of Upstate, it still falls short of New York state’s benchmarks for income and job growth. Downstate NY and the Capitol region (Albany) outperform Ithaca in income and job growth.
<table>
<thead>
<tr>
<th>UPSTATE NEW YORK</th>
<th>ALBANY METRO AREA</th>
<th>BINGHAMTON METRO AREA</th>
<th>BUFFALO METRO AREA</th>
<th>ELMIRA METRO AREA</th>
<th>GLENS FALLS METRO AREA</th>
<th>ITHACA METRO AREA</th>
<th>NORTH COUNTRY</th>
<th>ROCHESTER METRO AREA</th>
<th>SYRACUSE METRO AREA</th>
<th>UTICA METRO AREA</th>
<th>WATERTOWN METRO AREA</th>
<th>NEW YORK STATE</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2018)</td>
<td>883,000</td>
<td>240,000</td>
<td>1,130,000</td>
<td>84,000</td>
<td>125,000</td>
<td>103,000</td>
<td>307,000</td>
<td>1,071,000</td>
<td>651,000</td>
<td>291,000</td>
<td>112,000</td>
<td>19,542,000</td>
<td>327,167,000</td>
</tr>
<tr>
<td>Pop growth, 10-year change (2017)</td>
<td>1.9%</td>
<td>-4.9%</td>
<td>-0.5%</td>
<td>-4.8%</td>
<td>-2.8%</td>
<td>2.4%</td>
<td>-3.1%</td>
<td>-0.4%</td>
<td>-1.3%</td>
<td>-2.5%</td>
<td>-2.8%</td>
<td>1.7%</td>
<td>7.6%</td>
</tr>
<tr>
<td>GDP, billions (2017)</td>
<td>$54</td>
<td>$10</td>
<td>$60</td>
<td>$5</td>
<td>$5</td>
<td>$11</td>
<td>$57</td>
<td>$34</td>
<td>$11</td>
<td>$6</td>
<td>$1,598</td>
<td>$19,485</td>
<td></td>
</tr>
<tr>
<td>Job growth, 5-year change (2018)</td>
<td>5.8%</td>
<td>-1.5%</td>
<td>3.5%</td>
<td>-3.5%</td>
<td>1.6%</td>
<td>3.9%</td>
<td>3.2%</td>
<td>3.5%</td>
<td>2.4%</td>
<td>1.3%</td>
<td>-0.2%</td>
<td>8.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Median household income (2018)</td>
<td>$68,000</td>
<td>$50,000</td>
<td>$56,000</td>
<td>$50,000</td>
<td>$56,000</td>
<td>$57,000</td>
<td>$52,000</td>
<td>$56,000</td>
<td>$56,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$64,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Median home price (2017)</td>
<td>$200,000</td>
<td>$109,000</td>
<td>$140,000</td>
<td>$100,000</td>
<td>$169,000</td>
<td>$200,000</td>
<td>$110,000</td>
<td>$140,000</td>
<td>$130,000</td>
<td>$120,000</td>
<td>$140,000</td>
<td>$300,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Pop share age 25+ with BA+ (2017)</td>
<td>37.2%</td>
<td>26.8%</td>
<td>34.1%</td>
<td>23.9%</td>
<td>25.5%</td>
<td>52.2%</td>
<td>21.9%</td>
<td>34.1%</td>
<td>31.8%</td>
<td>22.5%</td>
<td>21.2%</td>
<td>36.0%</td>
<td>32.0%</td>
</tr>
</tbody>
</table>
Population has plateaued after reaching a historic high in 2013...
...with approximately 1 college student enrolled for every 3 residents.
Employment is dominated by education, food service, and local government.

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Employment</th>
<th>% Total MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges, Universities, and Professional Schools</td>
<td>12,800</td>
<td>26.8%</td>
</tr>
<tr>
<td>Restaurants and Other Eating Places</td>
<td>3,598</td>
<td>7.5%</td>
</tr>
<tr>
<td>Elementary and Secondary Schools</td>
<td>2,701</td>
<td>5.6%</td>
</tr>
<tr>
<td>Local Government, Non-Education</td>
<td>2,357</td>
<td>4.9%</td>
</tr>
<tr>
<td>Grocery Stores</td>
<td>1,377</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

U.S. Census Bureau - County Business Patterns; Institute for Education Sciences - Integrated Postsecondary Education Data System
Meanwhile unemployment rates continue to rest around 3.5%.
Cornell University: An Overview
• Cornell is a critical player in Ithaca’s economy.

• Cornell alone accounts for nearly 1 in 5 jobs in the Ithaca metro area.

• As a land-grant institution and rural university, Cornell is unique among the Ivy League. Its resources are a critical innovation asset to the Ithaca area, and Upstate NY in general.

Let’s take a closer look:
Cornell has the 13th largest higher education R&D expenditure in the nation...
...and ranks 6th in expenditure among Ivy League+ institutions.

*Johns Hopkins University includes the Applied Physics Laboratory, with $1,521,443,000 in total R&D expenditures in FY 2018.
National Science Foundation - Higher Education Research and Development Survey
But per capita, Cornell’s R&D spending is 5x greater than the next institution.

*Johns Hopkins University includes the Applied Physics Laboratory, with $1,521,443,000 in total R&D expenditures in FY 2018.
National Science Foundation - Higher Education Research and Development Survey
Cornell outpaces other Ivy+ universities in R&D funding from the National Science Foundation...
...and is the only Ivy+ institution to receive significant USDA funding.
Cornell also has a unique R&D relationship with state and local governments.
Cornell is an outlier among its peers, located in the smallest region of the group but performing highly in research funding and patent filings per capita.
The Rural College Town and the Economy
Rural college towns with a research university share unique assets:

• High levels of educational attainment
• Significant funds for STEM fields and research
• Innovation clusters
Ithaca’s peer communities share similar research institutions, population size (<250,000), and proportion of enrolled students to total population (>20%).

<table>
<thead>
<tr>
<th>CITY</th>
<th>CORNELL</th>
<th>IOWA STATE</th>
<th>INDIANA UNIVERSITY</th>
<th>UNIVERSITY OF ILLINOIS</th>
<th>OREGON STATE</th>
<th>PURDUE UNIVERSITY</th>
<th>KANSAS STATE</th>
<th>UNIVERSITY OF MISSISSIPPI</th>
<th>WASHINGTON STATE</th>
<th>MISSISSIPPI STATE</th>
<th>PENN STATE</th>
<th>OKLAHOMA STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSA</td>
<td>ITHACA, NY MSA</td>
<td>AMES, IA MSA</td>
<td>BLOOMINGTON IN MSA</td>
<td>CHAMPAIGN-URBANA, IL MSA</td>
<td>CORVALLIS, OR MSA</td>
<td>LAFAYETTE-W. LAFAYETTE IN MSA</td>
<td>MANHATTAN, KS MSA</td>
<td>OXFORD, MS MSA</td>
<td>PULLMAN, WA MSA</td>
<td>STARKVILLE, MS MSA</td>
<td>PARK, PA MSA</td>
<td>STILLWATER OK</td>
</tr>
</tbody>
</table>

| POPULATION (2018 est.) | 102,793 | 98,105 | 167,762 | 239,643 | 92,101 | 221,828 | 97,980 | 54,793 | 49,791 | 49,599 | 162,805 | 82,040 |
| %ENROLLMENT/ MSA POP. | 23.0% | 35.7% | 25.9% | 20.7% | 33.6% | 20.0% | 22.7% | 41.0% | 63.2% | 44.3% | 28.8% | 30.1% |
| R&D EXPENDITURE IN THOUSANDS (2018) | $1,071,621 | $361,206 | $566,206 | $652,709 | $272,433 | $631,574 | $218,299 | $137,521 | $360,522 | $244,102 | $908,708 | $188,756 |
| R&D PER CAPITA (2018) | $10,425 | $3,682 | $3,379 | $2,724 | $2,958 | $2,847 | $2,228 | $2,510 | $7,241 | $4,922 | $5,582 | $2,301 |
| PATENTS BY MSA (2000-2019) | 1,839 | 301 | 115 | 72 | 528 | 1,491 | 32 | 11 | 387 | 3 | 304 | 6 |
| PATENTS PER 1,000 PEOPLE | 1,789 | 307 | 69 | 30 | 573 | 672 | 33 | 20 | 777 | 6 | 187 | 7 |
| BA SHARE, 25+ (2018) | 56.5% | 54.6% | 43.8% | 44.0% | 56.5% | 36.5% | 45.3% | 46.1% | 52.6% | 47.1% | 47.2% | 40.0% |
The relationship between Ithaca and Cornell University is similar to these communities, more so than the role Ivy League Plus universities play in their communities. This could be meaningful for regional economic development strategy.

Let’s take a closer look at Ithaca.
52.6% of the Ithaca region’s population has a bachelor's degree or higher.

U.S. Census Bureau - American Community Survey 5-Year Estimates
Bachelor’s degree or higher includes master’s, professional degrees, and doctoral degrees
85.2% of doctoral degrees granted in the region are in STEM fields...

SHARE OF STEM DOCTORAL DEGREES IN ITHACA, NY MSA

2018

ITHACA, NY MSA SHARE
85.2%

NATIONAL SHARE
76.5%

National Science Foundation - Survey of Earned Doctorates
*The NSF classifies STEM as including life sciences, physical sciences and earth sciences, mathematics and computer sciences, psychology and social sciences, and engineering.
...and among those doctoral degrees, almost a quarter are in the life sciences.

STEM DOCTORAL DEGREES BY FIELD IN ITHACA, NY MSA
2018

- LIFE SCIENCES: 130; 24.1% (TOTAL SHARE; % TOTAL MSA)
- PHYSICAL SCIENCES + EARTH SCIENCES: 94; 17.4%
- ENGINEERING: 109; 20.2%
- PSYCHOLOGY + SOCIAL SCIENCES: 71; 13.2%
- MATHEMATICS + COMPUTER SCIENCES: 55; 10.2%
- NON-STEM FIELDS: 80; 14.8%

*The NSF classifies STEM as including life sciences, physical sciences and earth sciences, mathematics and computer sciences, psychology and social sciences, and engineering.
Higher education R&D expenditure in the Southern Tier ranks 2nd in NYS...
...and per capita expenditure dramatically outpaces the rest of the state.
Cornell contributes almost half a billion dollars annually in salaries, wages, and benefits from R&D jobs.
Life sciences research accounts for 68.8% of the region's expenditure.
The federal government is the largest source of R&D funds at Cornell.
Ithaca's SBIR/STTR award funding ranks second in New York State...
...and is more than 10x greater than the nearest city per capita.
How does CREA support the regional economy?
We fuel economic growth and diversity in Upstate New York through entrepreneurship and innovation.

We support and empower people to start and grow new ventures.
• Connect campus and community

• Leverage Cornell's strengths in innovation and entrepreneurship

• Economies of scale
Director and Program Leads

Tom Schryver
Executive Director

Ken Rother
Program Lead, Rev: Ithaca
Startup Works, eLab

Brad Treat
Program Lead, STSA

Andrea Ippolito
Program Lead, W.E. Cornell and BET

Jenn Smith
Program Director, Grow-NY

Brian Bauer
Program Director, Competitions

Nate Cook
Program Director, Kessler Fellows
Functional Leads

Molly Israel
Marketing Director

Liane O’Brien
Finance and Operations Manager

Caitlin Schickel
Program Manager

Christine Mehta
Research and Development

Hope Spithaler
Events and Project Management
Programs that CREA Administers

- 76West
- Grow-NY
- NY I-Corps Node
- SOUTHERN TIER Startup Alliance
- rev Ithaca Startup Works
- Napkin-to-Prototype HARDWARE ACCELERATOR
- Prototype-to-Production HARDWARE ACCELERATOR

Programs that CREA Supports

- eLab
- Cornell Engineering Commercialization Fellows
- Cornell Engineering Entrepreneurs in Residence
- BET
- Johnson Entrepreneurship Track
- Kessler Fellows
- The Center of Excellence for Food and Agriculture at Cornell AgriTech
199 Startups applied from 23 U.S. states and represented North America, Europe, Central America, Africa, the Middle East, and the Asia Pacific.
Incubators in the Southern Tier

- IncubatorWorks Corning
- Rev: Ithaca Startup Works
- McGovern Center at Cornell University
- Koffmann Southern Tier Incubator
- Start-Up Suite at Binghamton University
- Praxis Center for Venture Development
REV MEMBERS IN 2019

- **Capital Raised**: $21 M
- **Revenue Generated**: $20.7 M
- **New Employees**: 136